

SEQUENCE LISTING

<110> Rea-Min Chu

Ching-Yi Lin

Ya-Wen Hsiao

Kuang-Wen Liao

<120> COMPLEX IMMUNO-GENE MEDICAL COMPOSITION FOR INHIBITING TUMOR CELLS

<160>4

<210>1

<211>636

<212>mRNA and PRT

<213>Human

<221>IL-6

<300>

<308>NCBI pubmed Genbank : Accession No. : NM_000600

<400>1

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Glu	Phe	Glu	Val	Tyr	Leu	Glu	Tyr	Leu	Gln	Asn	Arg	Phe	Glu	Ser	Ser	Glu	Glu	Gln	Ala			
				125					130				135						140			
483				498					513				528								480	
aga	gct	gtg	cag	atg	agt	aca	aaa	gtc	ctg	atc	cag	ttc	ctg	cag	aaa	aag	gca	aag	aat			
Arg	Ala	Ala	Val	Gln	Met	Ser	Thr	Lys	Val	Ile	Gln	Phe	Leu	Gln	Lys	Lys	Ala	Lys	Asn			
				145					150					155						160		
543				558					573				588								540	
cta	gat	gca	ata	acc	acc	cct	gac	cca	acc	aca	aat	gcc	agc	ctg	ctg	acg	aag	ctg	cag			
Leu	Asp	Ala	Ile	Thr	Thr	Pro	Asp	Pro	Thr	Thr	Asn	Ala	Ser	Leu	Leu	Leu	Lys	Leu	Gin			
				165					170					175						180		
603				618					633				648								600	
gca	cag	aac	cag	tgg	ctg	cag	gac	atg	aca	act	cat	ctc	att	ctg	cgc	agc	ttt	aag	gag			
Ala	Gln	Asn	Gln	Trp	Leu	Gln	Asp	Met	Thr	Thr	His	Ile	Ile	Leu	Arg	Ser	Phe	Lys	Glu			
				185					190					195						200		
663				678					693				636									
ttc	ctg	cag	tcc	agc	ctg	agg	gct	ctt	cgg	caa	atg											
Phe	Leu	Gln	Ser	Ser	Leu	Arg	Ala	Leu	Arg	Gln	Met											
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<210>2

<211>60

<212>mRNA and PRT

<213>Human

<221>IL-2 Signal Peptide

<300>

<308>NCBI pubmed Genbank : Accession No. : V00564

<400>2

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Met	Tyr	Arg	Met	Gln	Leu	Leu	Ser	Cys	Ile	Ala	Leu	Ser	Leu	Ala	Leu	Val	Thr	Asn	Ser		
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<210>3

<211>342

<212>mRNA and PRT

<213>Human

<221>Partial Sequence Encoding Human IL-15

<300>

<308>NCBI pubmed Genbank : Accession No. : U14407

<400>3

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Asn	Trp	Val	Asn	Val	Ile	Ser	Asp	Leu	Lys	Lys	Ile	Glu	Asp	Leu	Ile	Gln	Ser	Met	His	
1				5					10					15					20	
att	gat	gct	act	tta	tat	acg	gaa	agt	gat	gtt	cac	ccc	agt	tgc	aaa	gta	aca	gca	atg	120
Ile	Asp	Ala	Thr	Leu	Tyr	Thr	Glu	Ser	Asp	Val	His	Pro	Ser	Cys	Lys	Val	Thr	Ala	Met	
				25					30					35					40	
aag	tgc	ttt	ctc	ttg	gag	tta	caa	gtt	att	tca	ctt	gag	tcc	gga	gat	gca	agt	att	cat	180
Lys	Cys	Phe	Leu	Leu	Glu	Leu	Gln	Val	Ile	Ser	Leu	Glu	Ser	Gly	Asp	Ala	Ser	Ile	His	
				45					50					55					60	
gat	aca	gta	gaa	aat	ctg	atc	atc	cta	gca	aac	aac	agt	ttg	tct	tct	aat	ggg	aat	gta	240
Asp	Thr	Val	Glu	Asn	Leu	Ile	Ile	Leu	Ala	Asn	Asn	Ser	Leu	Ser	Ser	Asn	Gly	Asn	Val	
				65					70					75					80	
aca	gaa	tct	gga	tgc	aaa	gaa	tgt	gag	gaa	ctg	gag	gaa	aaa	aat	att	aaa	gaa	ttt	ttg	300
Thr	Glu	Ser	Gly	Cys	Lys	Glu	Cys	Glu	Glu	Leu	Glu	Glu	Lys	Asn	Ile	Lys	Glu	Phe	Leu	
				85					90					95					100	
cag	agt	ttt	gta	cat	att	gtc	caa	atg	ttc	atc	aac	act	tct							342
Gln	Ser	Phe	Val	His	Ile	Val	Gln	Met	Phe	Ile	Asn	Thr	Ser							
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<210>4

<211>402

<212>mRNA and PRT

<213> Artificial Chimeric Sequence

<220>

<221> IL-2SP/IL-15MP

<223> Artificial Chimeric Sequence Encoding IL-2SP/IL-15MP

<300>

<308>NCBI pubmed Genbank : IL-2 Accession No. : V00564

IL-15 Accession No. : U14407

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Met	Tyr	Arg	Met	Gln	Leu	Leu	Ser	Cys	Ile	Ala	Leu	Ser	Leu	Ala	Leu	Val	Thr	Asn	Ser	
1				5					10					15					20	

Sequence encoding IL-2signal peptide

aac	tgg	gtg	aat	gta	ata	agt	gat	ttg	aaa	aaa	att	gaa	gat	ctt	att	caa	tct	atg	cat	120
Asn	Trp	Val	Asn	Val	Ile	Ser	Asp	Leu	Lys	Lys	Ile	Glu	Asp	Leu	Ile	Gln	Ser	Met	His	
				25					30					35					40	

att	gat	gct	act	tta	tat	acg	gaa	agt	gat	gtt	cac	ccc	agt	tgc	aaa	gta	aca	gca	atg		180
Ile	Asp	Ala	Thr	Leu	Tyr	Thr	Glu	Ser	Asp	Val	His	Pro	Ser	Cys	Lys	Val	Thr	Ala	Met		
				45					50					55					60		
aag	tgc	ttt	ctc	ttg	gag	tta	caa	gtt	att	tca	ctt	gag	tcc	gga	gat	gca	agt	att	cat		240
Lys	Cys	Phe	Leu	Leu	Glu	Leu	Gln	Val	Ile	Ser	Leu	Glu	Ser	Gly	Asp	Ala	Ser	Ile	His		
				65					70					75					80		
gat	aca	gta	gaa	aat	ctg	atc	atc	cta	gca	aac	aac	agt	ttg	tct	tct	aat	ggg	aat	gta		300
Asp	Thr	Val	Glu	Asn	Leu	Ile	Ile	Leu	Ala	Asn	Asn	Ser	Leu	Ser	Ser	Asn	Gly	Asn	Val		
				85					90					95					100		
aca	gaa	tct	gga	tgc	aaa	gaa	tgt	gag	gaa	ctg	gag	gaa	aaa	aat	att	aaa	gaa	ttt	ttg		360
Thr	Glu	Ser	Gly	Cys	Lys	Glu	Cys	Glu	Glu	Leu	Glu	Glu	Lys	Asn	Ile	Lys	Glu	Phe	Leu		
				105					110					115					120		
cag	agt	ttt	gta	cat	att	gtc	caa	atg	ttc	atc	aac	act	tct							402	
Gln	Ser	Phe	Val	His	Ile	Val	Gln	Met	Phe	Ile	Asn	Thr	Ser								
				125					130												